

AMENDMENTS TO THE ABSTRACT:

Please substitute the Abstract with the following:

A non-invasive device for measuring blood temperature in a circuit for the extracorporeal circulation of blood includes a line in which blood taken from a patient flows. The device also includes a temperature sensor connected to the line and provided with a device for measuring the intensity of an electromagnetic radiation. The measuring device faces a connecting portion or window of the line that is permeable by electromagnetic radiation in a first wave band, and generates a first signal, correlated with the electromagnetic radiation in the first band and therefore with the temperature of the blood flowing in the line.